REMARKS/ARGUMENTS

Upon entry of this Amendment, which amends Claims 4 and 15, cancels Claims 22-25, and adds Claim 27. Claims 22-25 which were found to be allowable are being prosecuted in a continuation application being filed concurrently with this response. Claims 1-21 and 26-27 are pending in the present application.

The Office Action was mailed July 11, 2005. Accordingly, a one month extension is requested, and a check for the extension amount is enclosed.

Applicants appreciate the time that the Examiner granted in the interview of October 19, 2005. Applicants feel that the conversation was productive and will move the prosecution of this application forward.

Applicants gratefully note the presence of allowable matter, as indicated in the July 11, 2005 Office Action. Claim 18 was rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. 6,687,238 to Soong (hereinafter referred to as Soong.) Claims 1-5 and 26 stand rejected under 35 U.S.C. §103(a) as allegedly obvious over U.S. Patent No. 5,805,640 to O'Dea (hereinafter referred to as O'Dea) in view of Applicant's Admitted Prior Art (Fig. 33). Claims 6-12, 15, and 19-21 rejected under 35 U.S.C. §103(a) as allegedly obvious over O'Dea in view of Applicant's Admitted Prior Art (Fig. 33), and further in view of Soong.

Claims 13, 14, 16, and 17 were objected to as being dependent upon a rejected base claim. The Action indicates that they would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims. Claims 21-25 were allowed.

US44

Applicant respectfully requests reconsideration of the claims in view of the above amendments and the comments below.

I.   *Objections to the Claims – Claims 13, 14, 16, and 17*

Claims 13-14 depend from Claim 1, and Claims 16-17 depend from Claim 15. The rejections of Claims 1 and 15 are believed to be allowable in the arguments that follow. Using the same reasoning as expressed in the text concerning Claims 1 and 15, among others, Claims 13, 14, 16, and 17 are respectfully believed to be allowable without such amendment. Applicants request that these objections be withdrawn in light of the discussion which follow.

II.   *35 U.S.C. §102(e) Claim Rejections*

Claim 18 was rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Soong. For the following reasons, Applicant respectfully disagrees.

A.   Standard

The standard for a proper rejection under 35 U.S.C. §102(e) is that "the reference must teach every element of the claim." (M.P.E.P. 2131) Additionally, "a claim is anticipated *only if each and every element* as set forth in the claim *is found ...in a single prior art reference*." (Emphasis Added) (Id., see also *Verdegaal Bros. v. Union Oil of California,* 914 F.2d 628, 631 (Fed. Cir. 1987)). Accordingly, if the cited art does not contain "each and every element as set forth in the claim", then a proper case of anticipation has not been made and the rejection is improper.

B.   Claim 18

Claim 18 recites a method of altering a communications signal to reduce an average-to-minimum power ratio thereof. The steps include "performing conditioning of the communications signal in a first domain to form a modified communications signal", *and* "performing conditioning of the modified communications signal in a second domain to form a further modified communications signal." The "first domain is one of a quadrature domain and a polar domain, and the second domain is a different one of the quadrature domain and the polar domain."

In Soong, the only modification to the signal apparently takes place in the quadrature domain. With respect to the portions of Soong cited in the Action, there is no indication of conditioning the communications signal in a second domain. The Examiner cites Figure 11 as illustrative as well as the text of Soong relating to that Figure. In that description, the only modification is achieved by subtracting the vectors Ic and Qc from Ra. In that context, the only conditioning is performed in the IQ domain (i.e. the quadrature domain.)

The action can also take place in Soong conditioning the signal by subtracting the vector Rc from the vector Ra. In this case, the only conditioning occurs in the polar domain (thus precluding conditioning in the IQ domain.) In fact, Fig. 12 emphasizes this, since the only conditioning that could take place is done in the polar domain, to the exclusion of the IQ domain. Thus, while conditioning of the signal is performed in Soong, this conditioning takes place in one domain, and not a first "conditioning in a first domain … *and* a [second] conditioning in a second domain[]" such as that recited in Claim 18.

Accordingly, the rejection of Claim 18 under §102(e) is respectfully traversed for this reason, among others. Applicants request that this rejection be withdrawn.

III.   35 U.S.C. §103(a) Claim Rejections

Claims 1-5 and 26 stand rejected under 35 U.S.C. §103(a) as allegedly obvious over O'Dea in view of Applicant's Admitted Prior Art (Fig. 33). Claims 6-12, 15, and 19-21 rejected under 35 U.S.C. §103(a) as allegedly obvious over O'Dea in view of Applicant's Admitted Prior Art (Fig. 33), and further in view of Soong.

A.   Standard

To establish and maintain a prima *facie* case of obviousness, the argument in the Office Action *requires*:

> i.   "some suggestion or motivation ... to combine";
>
> ii.   "a reasonable likelihood of success"; and
>
> iii.   "the prior art reference (or references when combined) must teach or suggest _all_ the claim limitations." (Emphasis added)

(M.P.E.P. 2143, *In re Vaeck*, 947 F.2d 488, USPQ2d 1438 (Fed. Cir. 1991)).

Accordingly, when a rejection cannot show these items *in toto*, the rejection must be withdrawn.

B.   Rejections over O'Dea in view of Applicant's Admitted Prior Art (Fig. 33) (Claims 1-5 and 26)

1.   Claim 1

Claim 1 recites a method of altering a communications signal to reduce an average-to-minimum power ratio. The includes the steps of "identifying *two or more signal sample points between which a communications signal is likely to reach a local envelope* minimum", and "using a mathematical model of the communications signal, determining a minimum of the communications signal envelope *between the signal sample points* and a time at which the minimum between the signal sample points occurs during said time interval[.]" (Emphasis added.)

The Examiner states that Figure 33 of the specification shows these points. However, a closer reading of the Figure reads "*The* sample point used to calculate the correction ... is indicated [in the Figure]." Thus, by the Figure itself and the description thereof, a singular point is used to determine the correction. Further, the Figure and the accompanying description (both in the Figure and in the description in the main body of the application) do not mention nor suggest using any more than the singular point, nor identifying anything more than such a single point.

Accordingly, Applicants respectfully object to the characterization in the Action that the Figure shows or suggests "identifying *two or more signal sample points between which a communications signal is likely to reach a local envelope* minimum", and "using a mathematical model of the communications signal, determining a minimum of the communications signal envelope *between the signal sample points* and a time at which the minimum between the signal sample points occurs during said time interval[.]" Accordingly, the rejection of Claim 1 under §102(e) is respectfully traversed for this reason, among others. Applicants request that this rejection be withdrawn.

2.   Claim 26

Claim 26 recites a method of conditioning a communications signal, wherein one step is "assigning mathematical coordinates to *two signal samples* of a communications signal, said two signal samples being in the temporal vicinity of a low-magnitude event of the communications signal[.]" (Emphasis added). In another step, the method recites "calculating a minimum magnitude of the communications signal using the mathematical *coordinates*[.]" (Emphasis added).

Again, the Examiner cites Figure 33 and its description as meeting this recitation. Again, like in Claim 1, the Applicants respectfully object to the characterization of this portion of the application as standing for "mathematical coordinates to two signal samples", or for any calculation using the aforementioned coordinates of the two signal samples.

Accordingly, the rejection of Claim 26 under §103(a) is respectfully traversed for this reason, among others. Applicants request that this rejection be withdrawn.

3.   Claims 2-5

Claims 2-5 depend from Claim 1. Accordingly, using the same reasoning as expressed in the text concerning Claim 1, among others, the rejections of Claims 2-56 under §103(a) are respectfully traversed. Applicants request that these rejections be withdrawn.

C.   Rejections over O'Dea in view of Applicant's Admitted Prior Art (Fig. 33) and further in view of Soong (Claims 6-12, 15, and 19-21)

In the Office Action, Claims 6-12, 15, and 19-21 were rejected under 35 U.S.C. §103(a) for allegedly being obvious over O'Dea in view of Applicant's Admitted Prior Art (Fig. 33) and further in view of Soong. For the following reasons, Applicant respectfully disagrees.

1.   **Claim 15**

Claim 15, as amended, recites a method of altering a communications signal to reduce an average-to-minimum power ratio thereof. The method includes the step of "identifying a time instant between samples at which the signal envelope falls below the desired signal envelope minimum[.]" As has been noted before, neither O'Dea nor the Admitted Prior Art show anything other than a single sample point that identifies a time at which the signal envelope is below the envelope minimum. Turning to Soong, the cited portion of Soong does not ameliorate this shortcoming.

With respect to the argument in the Office Action, Soong does not show two samples. It does show the creation of a new sample through vector addition, not, as claimed in the Office Action, two samples that occur. Soong seeks to reconstruct a particular sample at one particular time to correspond to certain constraints. Note at col. 9, line 28 that states "the time axis [of Figure 11 (the one cited in the argument in the Action)] come out of the page." Accordingly, the graph in question (and the discussion therein regarding Figure 11) cannot be said to be "identifying a time instant between two samples", such as that recited in Claim 15.

Accordingly, the rejection of Claim 15 under §103(a) is respectfully traversed for this reason, among others. Applicants request that this rejection be withdrawn.

2. Claims 6-12 and 19-21

Claims 6-12 and 19-21 depend from Claim 1. Soong does not show the missing items noted above with respect to the rejection of Claim 1, nor does Soong suggest such items. Accordingly, in a manner related to the traversal of the rejection of Claim 1, among others, the rejections of Claims 6-12 and 19-21 under §103(a) are respectfully traversed. Applicants request that these rejections be withdrawn.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this

Application are in condition for allowance. The issuance of a formal Notice of

Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of

this application, please telephone the undersigned at 408-579-9216.

Respectfully submitted,

Dated: October 20, 2005

Davis Gilmer
Reg. No. 44711

Tropian, Inc.
20813 Stevens Creek Blvd.,
Cupertino, Ca 95014
(408) 579-9216 Telephone
(408) 865-1140 Facsimile